

CLAIMS

1. Method for producing logs of wound web material, comprising the phases of:
- winding a quantity of web material (N) around a first winding core (A1) to form a first log (L1) in a winding area;
 - upon termination of winding the first log, bringing a second winding core (A2), provided with glue (C; C_C, C_T) on its surface, into contact with said web material;
 - severing the web material to produce a tail end (Lf) of the first log and a leading end (Li) to form a second log around said second winding core;
 - transferring a part of the glue from the second winding core to a portion of web material destined to be wound on the first log, in proximity to the free tail end, which is glued to the first log unloading said log from the winding area, characterized in that said portion of glue is transferred by the second core to the web material before severing of the web material.
2. Method as claimed in claim 1, characterized by:
- feeding the web material around a first winding element (1);
 - positioning a rolling surface (15) at a distance from said first winding element to define with it a channel (19) for introducing the winding cores;
 - introducing said second winding core (A1-A4) in said channel and making it roll, in contact with said rolling surface and with said web material fed around the first winding element;
 - after said second core has transferred part of the glue to the web material, severing the web material between said second core (A2) and said first log (L1);
 - continuing to make said second winding core roll along said channel starting winding of the second log (L2) around it.
3. Method as claimed in claim 1 or 2, characterized in that the web material is severed by tensioning said web material, downstream of the second winding core, to exceed the limit of tensile strength.
4. Method as claimed in claim 1, 2 or 3, characterized in that said glue (C; C_C, C_T) is applied to said winding cores (A1, A2, A3, A4) according to longitudinal bands.
5. Method as claimed in claim 4, characterized in that a single longitudinal band of glue (C) is applied to each core.
6. Method as claimed in claims 2 and 5, characterized in that the second

winding core (A2) is inserted into said channel (19) with the longitudinal band of glue (C) facing approximately opposite in respect of the contact area of said core with the web material.

7. Method as claimed in claim 4, characterized in that two longitudinal
5 bands of glue (C_C, C_T) are applied to each core, to glue the free tail end of the first completed log and to secure the free leading end to the second winding core.

8. Method as claimed in claim 7, characterized in that said two bands are composed of glues with different characteristics.

9. Method as claimed in at least claim 3, characterized in that said web
10 material is tensioned after the second core has been introduced into said channel.

10. Method as claimed in claims 3 and 6, characterized in that said core is made to rotate along said channel to complete approximately a full turn before severing said web material.

11. Method as claimed in at least one or more of the claims from 4 to 8,
15 characterized in that said longitudinal bands of glue are discontinuous.

12. Method as claimed in at least claim 2, characterized in that said first winding element is a winding roller.

13. Method as claimed in claim 12, characterized in that at least a part of winding takes place in a winding cradle (11) defined by said first winding roller and
20 by a second and a third winding roller (3, 5).

14. Method as claimed in claim 13, characterized in that the web material is severed by accelerating said third winding roller (5).

15. A peripheral rewinding machine to produce logs (L1, L2) of web material (N) wound around tubular cores, comprising:

- 25 - a winding cradle (11) with at least a first winding element (1) around which said web material (N) is fed;
- a feeding means (23) to introduce said winding cores (A1-A4) towards said winding cradle (11);
- means to sever the web material upon termination of winding each log (L1, L2);
- 30 - a glue dispenser (29) to apply a glue (C) to said cores, before introducing them into said winding cradle;

wherein said feeding means and said means to sever the web material are synchronized so that a winding core is brought into contact with the web material fed around said first web element before the web material is severed,

characterized in that introduction of the winding core and operation of the means to sever the web material are coordinated so that the web material is severed in an area upstream, in respect of the direction of feed of the web material, of an area in which said winding core transferred part of the glue applied to it to the web material.

5 16. Rewinding machine as claimed in claim 15, characterized by a rolling surface (15) defining with said first winding element (1) a channel (19) to introduce said winding cores (A1. A4); and wherein said winding cores are introduced into said channel and made to rotate inside it before severing of the web material.

10 17. Rewinding machine as claimed in claim 15 or 16, characterized in that said means to sever the web material comprise at least a winding roller (5) associated with acceleration means, which cause acceleration of said winding roller to tension and sever the web material between the completed log (L1) and a new winding core (A2).

15 18. Rewinding machine as claimed in one or more of the claims from 15 to 17, characterized in that said glue dispenser applies said glue along longitudinal bands on said cores.

 19. Rewinding machine as claimed in claim 18, characterized in that said glue dispenser applies said glue along a single longitudinal band on each core.

20 20. Rewinding machine as claimed in claims 16 and 19, characterized in that said glue dispenser, said feeding means and said channel are disposed so that the cores are introduced into the channel with the longitudinal band of glue facing approximately in the opposite direction to the contact area between the tubular winding core and the web material fed around said first winding element.

25 21. Rewinding machine as claimed in one or more of the claims from 15 to 18, characterized in that said glue dispenser applies, on each core, at least two separate longitudinal bands of glue.

 22. Rewinding machine as claimed in claim 21, characterized in that said dispenser dispenses glues of different types along said two longitudinal bands.